WHAT IS CLAIMED IS:

1. An isolated CLASP-5 polynucleotide, wherein said polynucleotide is

(a) a polynucleotide that has the sequence of SEQ ID NO:1 or

(b) a polynucleotide that hybridizes under stringent hybridization conditions to (a) and encodes a polypeptide having the sequence of SEQ ID NO:2 or an allelic variant or homologue of a polypeptide having the sequence of SEQ ID NO:2; or

(c) a polynucleotide that hybridizes under stringent hybridization conditions to (a) and encodes a polypeptide with at 25 contiguous residues of the polypeptide of SEQ ID NO:2; or

(d) a polynucleotide that hybridizes under stringent hybridization conditions to (a) and has at least 12 contiguous bases identical to or exactly complementary to SEQ ID NO:1.

2. The polynucleotide of claim 1 that encodes a polypeptide having the full-length sequence of SEQ ID NO:2.

3. The isolated polynucleotide of claim 1, comprising the cDNA coding sequence of ATCC accession numbers PTA-1565, PTA-1568, PTA-2609 or PTA-2612.

4. An isolated CLASP-5 polynucleotide comprising a nucleotide sequence that has at least 90% percent identity to SEQ ID NO:1.

5. An isolated polypeptide comprising a nucleotide sequence that has at least 90% sequence identity to SEQ ID NO:2 and is immunologically crossreactive with SEQ ID NO:2 or shares a biological function with native CLASP-5.

6. A vector comprising the polynucleotide of claim 1.

7. An expression vector comprising the polynucleotide of claim 1 in which the nucleotide sequence of the polynucleotide is operatively linked with a regulatory sequence that controls expression of the polynucleotide in a host cell.

8. A host cell comprising the polynucleotide of claim 1, or progeny of the cell.

9. A host cell comprising the polynucleotide of claim 1, wherein the nucleotide sequence of the polynucleotide is operatively linked with a regulatory sequence that controls expression of the polynucleotide in a host cell, or progeny of the cell.

10. The host cell of claim 8 which is a eukaryote.

11. The polynucleotide of claim 1 that is an antisense polynucleotide less than about 200 bases in length.

12. An antisense oligonucleotide complementary to a messenger RNA comprising SEQ ID NO:1 and encoding CLASP-5, wherein the oligonucleotide inhibits the expression of CLASP-5.

13. An isolated DNA that encodes a CLASP-5 protein as shown in SEQ ID NO:2.

14. The polynucleotide of claim 1 that is RNA.

15. A method for producing a polypeptide comprising:

(a) culturing the host cell of claim 8 under conditions such that the polypeptide is expressed; and

(b) recovering the polypeptide from the cultured host cell or its cultured medium.

16. An isolated polypeptide encoded by a polynucleotide of claim 1.

17. The polypeptide of claim 16 that has the amino acid sequence of SEQ ID NO:2 or a fragment thereof.

18. The isolated polypeptide of claim 16, wherein the polypeptide is cell-membrane associated.

19. The isolated polypeptide of claim 16, wherein the polypeptide is soluble.

20. The polypeptide of claim 17, wherein the polypeptide is fused with a heterologous polypeptide.

21. An isolated CLASP-5 protein having the sequence as shown in SEQ ID NO:2.

22. A protein comprising the sequence as shown in SEQ. ID. NO:1 and variants thereof that are at least 95% identical to SEQ ID. NO:2 and specifically binds spectrin.

23. An isolated antibody that specifically binds to a polypeptide having the amino acid sequence as shown in SEQ ID NO:2, or a binding fragment thereof.

24. The antibody of claim 23, that is monoclonal.

25. A hybridoma capable of secreting the antibody of claim 24.

26. A method for identifying a compound or agent that binds a CLASP-5 polypeptide comprising:

i) contacting a CLASP-5 polypeptide of claim 17 with the compound or agent under conditions which allow binding of the compound to the CLASP-5 polypeptide to form a complex and

ii) detecting the presence of the complex.

27. A method of detecting a CLASP-5 polypeptide in a sample, comprising:

(a) contacting the sample with an antibody or binding fragment of claim 24 and (b) determining whether a complex has been formed between the antibody and with CLASP-5 polypeptide.

28. A method of detecting a CLASP-5 polypeptide in a sample, comprising:

(a) contacting the sample with a polynucleotide of claim 1 or a polynucleotide that comprises a sequence of at least 12 nucleotides and is complementary to a contiguous sequence of the polynucleotide of section (a) of claim 1, and (b) determining whether a hybridization complex has been formed.

29. A method of detecting a CLASP-5 nucleotide in a sample, comprising:

(a) using a polynucleotide that comprises a sequence of at least 12 nucleotides and is complementary to a contiguous sequence of the polynucleotide of section (a) of claim 1, in an amplification process; and

(b) determining whether a specific amplification product has been formed.

30. A pharmaceutical composition comprising a polynucleotide of claim 1, a polypeptide of claim 16, or an antibody of claim 23 and a pharmaceutically acceptable carrier.

31. A method of inhibiting an immune response in a cell comprising:

(a) interfering with the expression of a CLASP-5 gene in the cell;

(b) interfering with the ability of a CLASP-5 protein to bind to another cell;

(c) interfering with the ability of a CLASP-5 protein to bind to another protein.

32. The method of claim 31, wherein the cell is a T cell or a B cell.

33. The method of claim 31 comprising contacting the cell with an effective amount of a polypeptide which comprises the amino acid sequence of SEQ ID NO:2 or a fragment thereof.

34. A method of inhibiting an immune response in a subject, comprising administering to the subject a therapeutically effective amount of an antibody which specifically binds a polypeptide having the sequence of SEQ ID NO:2.

35. A method of preventing or treating a CLASP-5-mediated disease comprising administering to a subject in need thereof a therapeutically effective amount of a pharmaceutical composition of claim 30.

36. The method claim 35, wherein the CLASP-5-mediated disease is an autoimmune disease.

37. A method of treating an autoimmune disease in a subject caused or exacerbated by increased activity of T_H1 cells consisting of administering a therapeutically effective amount of a pharmaceutical composition of claim 30 to the subject.